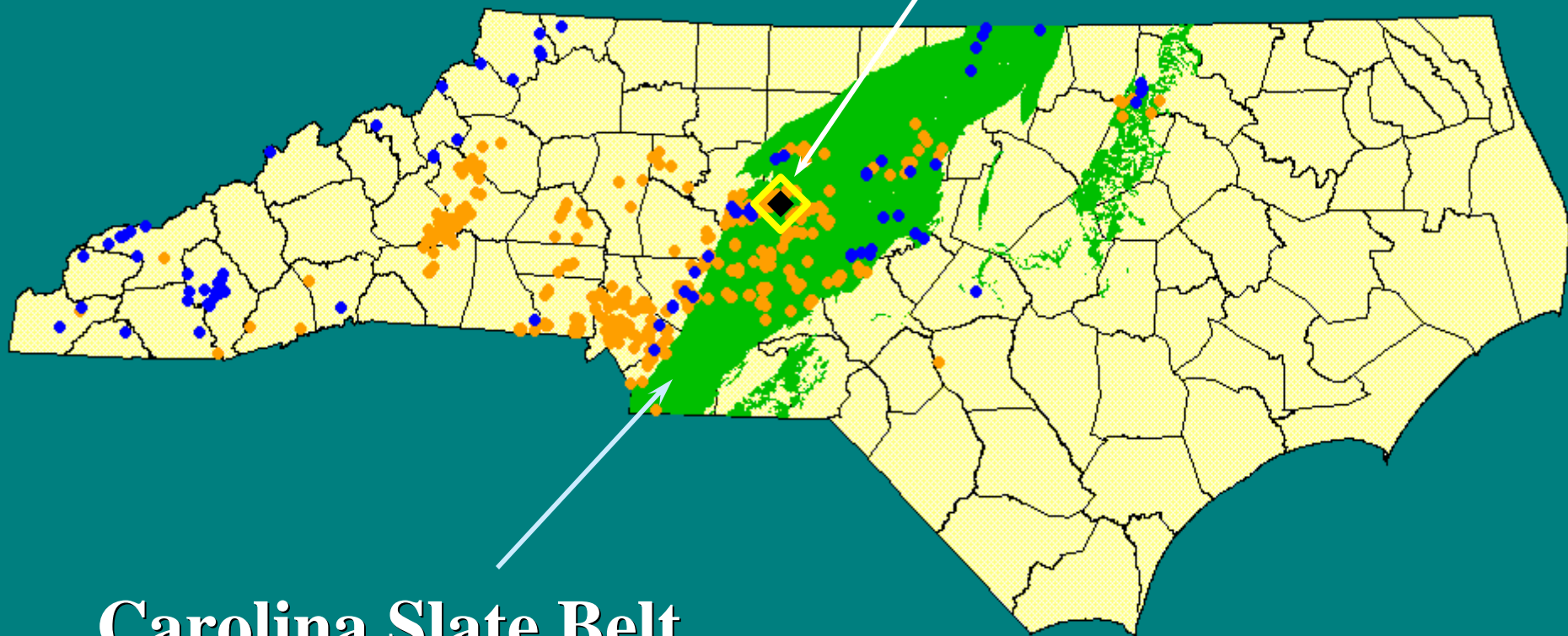


Loflin Mine



Carolina Slate Belt



Figure 20. Log rockers and Chilean drag mill and rockers near Gold Hill, about 1896 (From Nitze and Wilkens, 1897).

**Locations of
mine workings
and residences.**

Arsenic in Soils

**50 mg/kg and
400 mg/kg
contours.**

Soil Arsenic in Residential Yards; mg/kg

Arsenic Speciation

- Predominantly As^{+5}
- $\text{As}^{+3} / \text{As}^{+5} = 0.002 \text{ to } 0.019$
- Higher ratios from unoxidized rock samples.

- Biomonitoring limited to few volunteers.
- Detected As levels not considered unsafe.
- Correlation with As levels in household dust

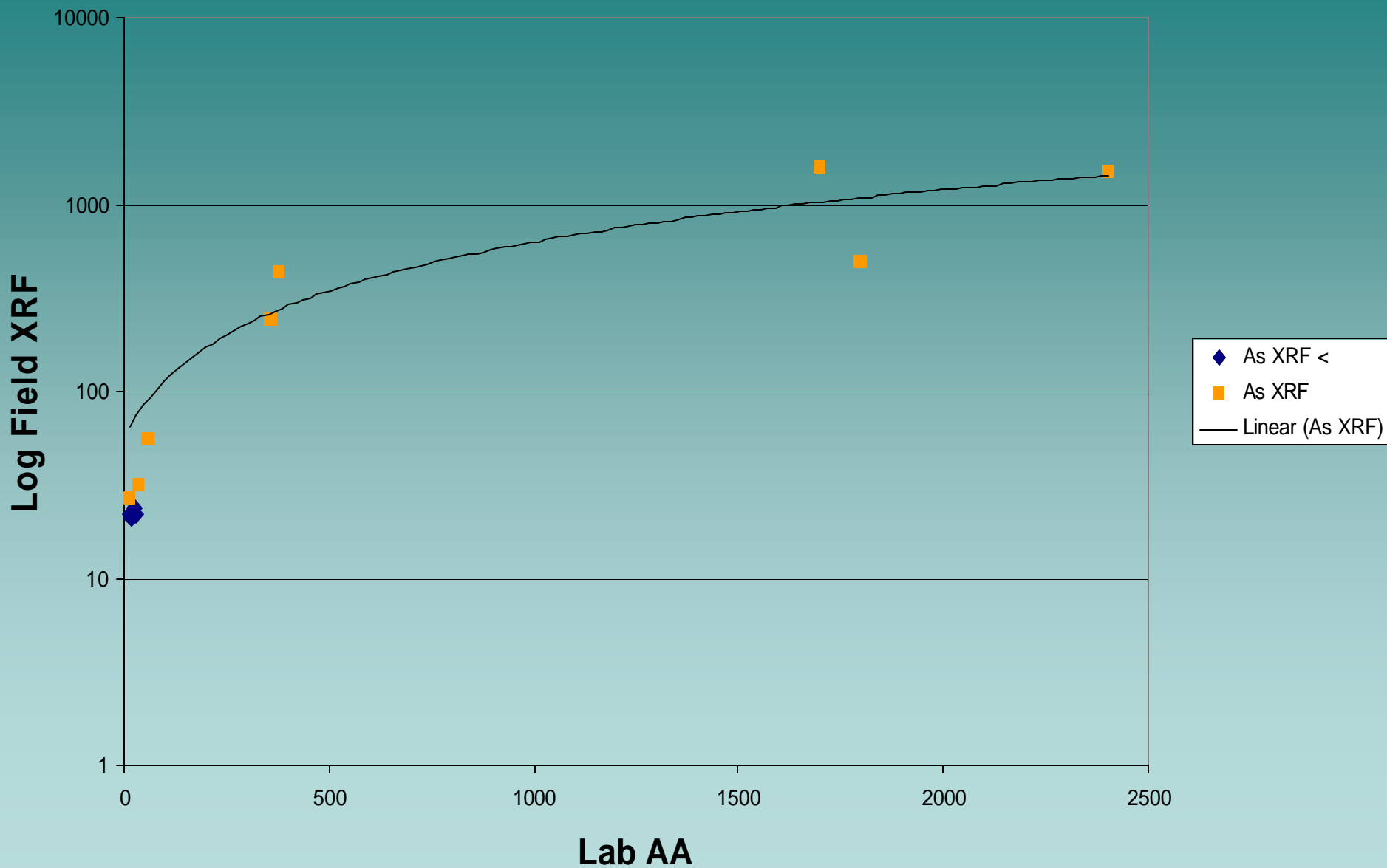
HRS Scoring

**Areas with
Mine Dump
Material**

Removal Work Plan

- Turf in existing yards where soil As $> 40\text{mg/kg}$
- Additional sampling (indoor dust, biological?)
- Confirmation sampling w/alternative analytical tools

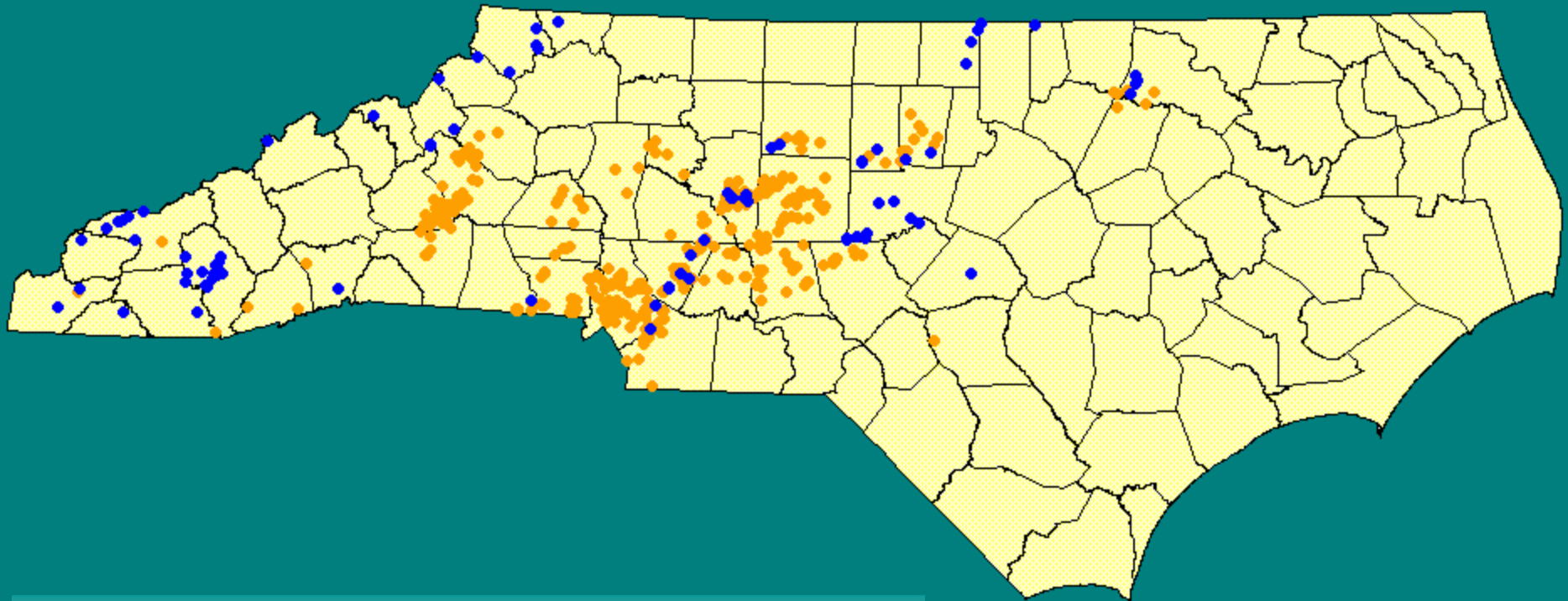
Loflin Field XRF/Lab AA Comparison



Coordination w/County Agencies

- Share GIS records of mine locations and sampling data
- Loflin Removal as template for development requirements
- Sampling backup

Abandoned Gold and Base Metal Mines in North Carolina



~ 400 Gold mines and prospects

~ 85 Base metal mines and prospects